

PATENT
MB&P Ref. No.: I 3527-RO/SEI
Atty. Dkt. No. INFN/MB0061

IN THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 16 to include "Prior Art".

Attachment: Replacement Sheet

PATENT
MB&P Ref. No.: I 3527-RO/SEI
Atty. Dkt. No. INFN/MB0061

REMARKS

This is intended as a full and complete response to the Office Action dated January 21, 2005, having a shortened statutory period for response set to expire on April 21, 2005. Please reconsider the claims pending in the application for reasons discussed below.

In the specification, the paragraph [0058] has been amended to correct minor editorial problems. In the drawings, Figure 16 has been amended as prior art. Applicant submits that the objections to the drawings have been obviated in view of these amendments and respectfully requests withdrawal of these objections.

Claims 1-15 are pending in the application. Claims 1-4 remain pending following entry of this response. Claims 5-9 and 12-15 have been withdrawn. Claims 10-11 have been cancelled. Claim 1 has been amended. New claims 16-20 have been added to recite aspects of the invention. Applicant submits that the amendments and new claims do not introduce new matter.

Election / Restriction

The Examiner stated that the requirement is still deemed proper and is made final even though the Examiner admits that limitation relied upon the Examiner to restrict the claims of Group II (claims 5-9 and 12-15) is only recited in one dependent claim (in claim 9 only). Applicant submits that the Examiner has not satisfied the criteria for restricting the remaining claims of Group II and respectfully requests reconsideration, withdrawal of the restriction requirement and reinstatement of these claims for examination.

Claim Rejections - 35 USC § 102

Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by *Kondou et al.* (USPN 4,902,637, hereinafter "*Kondou*"). Applicant respectfully traverses this rejection in view of the amendment to claim 1.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051,

PATENT
MB&P Ref. No.: I 3527-RO/SEI
Atty. Okt. No. INFN/MB0081

1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

In this case, *Kondou* does not disclose "each and every element as set forth in the claim". *Kondou* discloses a semiconductor device in which active regions 12 are connected to an interconnection layer 11 or to another active region 22a. A gate electrode 14c is connected to an active region 22c, and an interconnection layer 21 connects active regions 22. (See Figure 2, Col. 3, Ln. 47 to Col. 4, Ln. 2). However, *Kondou* does not teach, show or suggest a semiconductor device having a first contact connected to a first conductor in a first patterned metal plane and a second contact connected to a second conductor in a second patterned metal plane, without an intermediate connection to any conductor of the first metal plane, wherein the first conductor is electrically connected to another second conductor in the second patterned metal plane which is disposed above the first conductor in the substrate-normal direction. Therefore, Applicant submits that claims 1, 3 and 4 are patentable over *Kondou*.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by *Fukuda et al.* (USPN 6,462,395, hereinafter "*Fukuda*"). Applicant respectfully traverses this rejection in view of the amendment to claim 1.

Fukuda discloses a semiconductor device in which diffusion areas 41a and 41b are connected to a first-layer wiring pattern 44a and 44b while a gate electrode 42b is connected to a contact pad 46a. (See Figure 8B, Col. 5, Lns. 30-67, and Col. 8, Lns. 25-31).

However, *Fukuda* does not teach, show or suggest a semiconductor device having a first contact connected to a first conductor in a first patterned metal plane and a second contact connected to a second conductor in a second patterned metal plane, without an intermediate connection to any conductor of the first metal plane, wherein the first conductor is electrically connected to another second conductor in the second patterned metal plane which is disposed above the first conductor in the substrate-

PATENT
MB&P Ref. No.: I 3527-RO/SEI
Atty. Dkt. No. INFN/MB0061

normal direction. Therefore, Applicant submits that claims 1, 3 and 4 are patentable over *Fukuda*.

Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by *Mitsuya et al.* (JP 2000-236027, hereinafter "*Mitsuya*"). Also, claim 10 is rejected under 35 U.S.C. 102(e) as being anticipated by *Inumiya et al.* (US PG-Pub 2002/0117698, hereinafter "*Inumiya*"). Claim 10 has been canceled.

Claim Rejections - 35 USC § 103

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Kondou / Fukuda* in view of *Yokoyama*, US PG-Pub 200110029079. Applicant respectfully traverses this rejection in view of the amendment to claim 1.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. The present rejection fails to establish at least the third criteria.

As discussed above, the references *Kondou* and *Fukuda* fail to disclose all of the limitations recited in claim 1. *Yokoyama* discloses a semiconductor device in which parts 305, 204 of a transistor are connected to a wiring line 12 through plugs 209, 208, respectively. (See Abstract, Figure 5). The references cited by the Examiner, either alone or in combination, do not teach, show or suggest a semiconductor device having a first contact connected to a first conductor in a first patterned metal plane and a second contact connected to a second conductor in a second patterned metal plane, without an intermediate connection to any conductor of the first metal plane, wherein the first conductor is electrically connected to another second conductor in the second patterned metal plane which is disposed above the first conductor in the substrate-

PATENT
MB&P Ref. No.: I 3527-RO/SEI
Atty. Dkt. No. INFN/MB0061

normal direction. Therefore, Applicant submits that claim 2 is patentable over *Kondou / Fukuda* in view of *Yokoyama*.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Inumiya / Mitsuya* in view of *Yokoyama* US PG-Pub 2001/0029079. Claim 11 has been canceled.

Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that the claims be allowed.

Respectfully submitted,



Randol W. Read
Registration No. 43,876
MOSER, PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicant